

### AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims:**

1. - 6. (Canceled)

7. (Previously Presented) A method for improving affinity with a fibrin glue of a polymeric material comprising carbon or silicon as a constitutional element comprising irradiating at least a portion of a surface of the polymeric material with ions to form an ion-modified polymeric material; and applying the fibrin glue to the irradiated at least a portion of a surface of the polymeric material.

8. (Previously Presented) The method according to claim 7 wherein the ion-modified polymeric material includes a non-irradiated portion and the non-irradiated surface is placed into contact with dura mater.

9. (Previously Presented) The method according to claim 7 wherein the polymeric material is an artificial dura mater, an artificial blood vessel, a patch for the heart or blood vessel, or a surgical suture.

10. (Previously Presented) The method according to claim 7 wherein the material comprising carbon or silicon as a constitutional element comprises expanded polytetrafluoroethylene (ePTFE), polylactic acid, or polyglactin.

11. (Previously Presented) The method according to claim 7 wherein the polymeric material is an artificial dura mater.

12. (Previously Presented) The method according to claim 7 wherein the irradiating at least a portion of a surface of the polymeric material comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{12} \leq \phi \leq 1 \times 10^{16}$  ions/cm<sup>2</sup>.

13. (Previously Presented) The method according to claim 12 wherein the irradiating at least a portion of a surface of the polymeric material comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{13} \leq \phi \leq 1 \times 10^{15}$  ions/cm<sup>2</sup>.

14. (Previously Presented) The method according to claim 12 wherein the ions include H<sup>+</sup>, He<sup>+</sup>, C<sup>+</sup>, N<sup>+</sup>, Ne<sup>+</sup>, Na<sup>+</sup>, N<sub>2</sub><sup>+</sup>, O<sub>2</sub><sup>+</sup>, Ar<sup>+</sup>, Kr<sup>+</sup>, and Xe<sup>+</sup>.

15. (Canceled)